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ORIGINAL ARTICLE

Myths of the City

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Abstract Through an online survey, we assessed the views about urban life and urban development of 500 Australian citizens living in three large cities. Differences in perceptions and opinions can be described along three dimensions which, in alignment with cultural theory, we name Myths of the City. The analysis of their relation to a number of constructs from the social cognition literature reveals that each myth has a clear and distinct cognitive signature. The Cultural City Myth combines a positive attitude towards life in large cities and urban growth with concerns about equity, power balance, and social and environmental crises while endorsing larger public participation in urban planning. The Anti-Urban Myth holds a bleak outlook on the future, resulting in a negative view of urban life and urban growth. The Mighty City Myth, endorsed by younger, better educated, less liberal citizens, reflects expectations that all aspects of future life will improve. Surprisingly, the three myths share a small, but statistically significant positive correlation implying that some citizens may simultaneously hold contrasting beliefs about urban issues. Both these results and the use of the questionnaire developed for this study can facilitate public engagement and communication around issues of urban management and policy making.

Keywords Urban development · Urban management · Cultural Theory · Social cognition · Urban resilience

Introduction

It is currently widely accepted that the careful management of large cities, which today host the majority of the world population, is crucial to both environmental sustainability and human wellbeing in terms of social, economic and political progress (Jansson 2013; Fang et al. 2016; Hoornweg et al. 2016; Wolfram and Frantzeskaki 2016). What is less clear though is what managing large cities consist of. This lack of clarity is for many reasons, including the size and complexity of cities, the level of decentralisation in institutional and political power, and the fact that the very concept of 'a large city' can differ both between people and within people under different contexts (Hummon 1985; Moir et al. 2014; Pratt 2014; Urry et al. 2014). A large city can be viewed as a place where many people live, a source of employment for a large regional population catchment, an engine of economic prosperity, a locus of technological and cultural innovation, an economic actor competing in the global economy, a man-made engineered environment or a sink of natural resources. It can be a symbol of national identity or a showcase of globalisation. Each of these views leads naturally to different models of and priorities for urban management. The principles of democratic government, and the recommendations for sustainable development and path towards resilience (Fulton et al. 2013; O'Connell et al. 2015;

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Boschetti et al. 2016a), all call for different conceptualisations of a city, and for management and policy making to be negotiated, compromised, agreed upon, and ultimately endorsed by the majority of citizens. It is thus important to understand and regularly monitor how the general public conceptualises large cities and the challenges related to their management. Towards this aim, in this work we attempt to empirically determine the key beliefs citizens share about large cities and the key issues on which they differ.

We propose that such identification has three main purposes. First, it provides an avenue to assess the alignment between the visions of large cities held by decision makers, academicians, and the general public. Second, within a public engagement process, it can help parties quickly zoom in on the concerns and beliefs stakeholders are likely to hold by casting the decision-making issue within this context, potentially reducing the risk of time-consuming misunderstanding. Third, it can help decision makers and academicians identify what beliefs and concerns are not widely shared among the general public and whether they need to be included in a policy discourse.

We provide three main contributions to the literature. First, via an online survey we identify three sets of key beliefs which shape the views Australian citizens hold of the large cities they live in. These beliefs reveal both perceptions and concerns about living in three large Australian cities: Sydney, Melbourne, and Perth. Second, we cast these results within the social cognition literature with specific reference to attitudes towards urban life and discuss which components of our results are and which are not aligned with the current literature. Third, we make the online survey described in this work available for future research and make suggestions of how it can be modified for and extended to different national settings. The first and the third contributions are relevant to both researchers and practitioners since they provide insights, as well as a tool which can be used in specific projects to identify and explore different world views related to the key priorities for ongoing development of major cities. These are described in Sect. 3 onward. The second contribution is addressed in Sect. 2. It provides a theoretical foundation for both the development of the survey and the interpretation of the results by framing attitudes towards large cities within a social cognition literature. Readers less interested in this theoretical foundation may go directly to Sect. 3, without compromising the understanding of the overall work.

Theoretical framing

Our work is based on two frameworks: the Cultural Theory (Dake 1991, 1992; O'Riordan and Jordan 1999; Steg and Sievers 2000; Price et al. 2014), inherited from the social cognition literature (Kahan et al. 2007, 2010; Kahan 2008), and the Causal Layered Analysis (Inayatullah 1998, 2004a, b), from the Future Studies literature. Here, we describe how these theories can help us explore the laypersons' thinking about cities.

The Cultural Theory

The cultural theory describes broad beliefs about how society (Myths of Human Nature) and nature (Myths of Nature) function and should be managed. The myths of human nature describe three preferences for ways to manage Society: 'hierarchical' (focused on top-down regulations), 'individualistic' (focused on individual freedoms), and 'egalitarian' (focussed on bottom-up local, socially negotiated institutions), plus a fourth 'fatalistic' view which sees most attempts at social order as fundamentally in vain. Each of these beliefs underlays a different worldview about Society according to which humans are (1) flawed, but potentially improvable by social institutions, thereby justifying a hierarchal social organisation, (2) self-serving, ambitious and competitive, endorsing individual freedoms, (3) altruistic, but potentially corruptible by social and market institutions, supporting egalitarian institutions and (4) unjust and unworthy, leading to fatalistic attitudes.

The cultural theory also suggests that a close relation exists between myths of human nature and myths of nature (Douglas 1966; Douglas and Wildavsky 1982; Douglas 1985; O'Riordan and Jordan 1999; Kahan et al. 2011) (but see also Price et al. 2014), thereby preferences for social organisation also underlay worldviews about nature which can be perceived as (1) 'tolerant and stable within limits', highlighting the importance of regulation and, thus, a hierarchal social order, (2) 'benign and overall stable', allowing for the individual freedom of pursuing an essentially unlimited exploitation under market driven initiatives, (3) 'fragile', requiring fundamental behavioural and social changes towards an egalitarian non-materialistic society and (4) 'capricious and unpredictable', fatalistically invalidating any attempt at management.

Some applications of the Cultural Theory to urban management are discussed in Thompson and Beck (2015) (see also references within). Nevertheless, extending the notion of Myths of Human Nature and Myths of Nature to an urban setting should not be carried out uncritically, since it is not clear to what extent adherence to one of the four Myths of Human Nature is an individual's stable psychological trait or whether it is context dependent. As a result, adherence to a specific myth pertinent to the management of Society at large or Nature does not necessarily imply that a similar myth could be endorsed when discussing the management of a city. For example,

the extent to which preferences on how to manage nature align with preferences on how to manage large cities may depend on the extent to which large cities are seen as a part of nature or as its antithesis [see (Boschetti et al. 2017) for a discussion of this issue in relation to urban resilience].

The Causal Layered Analysis

The second framework we adopt in this work, the Causal Layered Analysis (Inayatullah 1998, 2004a, b), posits that when we wish to understand people's beliefs and views about an issue it is important to consider levels of increasing conceptual or cognitive depth. According to this theory, at each layer, beliefs and views are expressed or represented differently, taking the form of either images, narratives, explanations, attitudes, or assumptions. The Causal layered analysis suggests that analysis should be carried out at four levels. The first level includes litanies, which are statements, stereotypes or vignettes, in our case reflecting views of urban life and urban development. Litanies have three important features: (1) they are short and concise, (2) they belong to the public discourse, in the sense that people are rarely the creators of the litanies they use; litanies may be heard in casual conversations or from the news and may spread via social media, thus, they are shared and recognisable to the significant majority of the population, and (3) they usually mean more than what their brief content literally says. Because they belong to the public discourse, users understand the implied meaning of a litany and can 'borrow' such litany to express the belief or attitude it represents. The second level—social causation—are attempts to explain and justify the litanies by revealing their assumed causes. Here is where technical explanations, rational arguments, or mental models of what drives urban development, or how certain policies may hinder or enhance urban liveability, may be found. The third level (core assumptions) sits underneath these mental models and is rarely questioned at this level. This level includes the deeper ideological assumptions and worldviews which support and legitimate both the litanies and the rational explanations found at the previous two levels. The fourth level (metaphors), which we do not address in this work, consists of deeply held and culturally shared images rather than explicit statements.

For the purpose of this work, the link between the Cultural Theory and the Causal layered analysis lays in the observation that the empirical work in the cultural theory literature largely consists of asking respondents to express their level of agreement with short statements closely resembling the litanies at the top level of the Causal layered analysis. In addition, the constructs, so identified (attitudes, worldviews, myths, etc.), naturally lay at the third level of the Causal layered analysis.[1] This observation has motivated our approach to the identification of the Myths of the Future described in (Boschetti et al. 2016). Here, we extend this approach to the identification of a set of Myths of the City by first selecting a number of candidate litanies which express opinions or views of the life and functioning of a city, then asking a sample of Australian citizens to state their level of agreement with these statements and finally employing statistical tools commonly used in the psychological and social sciences to determine a small number of shared core beliefs which explain the responders' level of agreement with the litanies. Each Myth of the City, thus, represents a unique and relatively small set of litanies which define how the myth is expressed. Importantly, once the myths are identified, a much smaller set of litanies need including in a questionnaire for further analysis (we make this questionnaire available in Appendix B). Finally, the meaning of each Myth of the City can be further explored by analysing its relation to other social cognition constructs as discussed in Sect. 5.

Method

In this section, we briefly summarise the approach we employed in this work, including how we selected the candidate litanies, how we developed the overall questionnaire, how the survey was run, and how the responders have been selected. Full details of each of these steps can be found in the Supplementary Materials in Appendix C.

To select the litanies for inclusion in the questionnaire we followed a two-step approach as described in (Boschetti et al. 2016). The first step consisted of a broad literature review to identify the core topics commonly associated with the public discourse about cities. This review included (1) the academic literature related to urban studies, (2) foresight studies describing scenarios of future urban development and future challenges for urban planning and design, and (3) the general literature (city councils' websites, Australian newspapers, etc.) to gain a layman's perspective of these issues. A list of the publications we consulted and the selected topics are available in Appendix C, Section C.1

The second step consists in selecting a number of litanies for each identified topic, resulting in a total of 98 litanies. This number reflects a pragmatic compromise between including a wide range of litanies and cognitive constructs in the questionnaire and ensuring the survey

[1] Since the litanies explore the level of agreement to brief superficial conceptualisations of an issue while worldviews and myths represent deeper beliefs and attitudes, the empirical work in the Cultural Theory usually sidesteps the rational or causal interpretation which would sit at the second level of the Causal layered analysis.

does not exceed 25–30 min to complete. The full list of candidate litanies is found in Section 2 of the questionnaire in Appendix D.

In addition to the litanies, the questionnaire also includes a number of constructs which allow us to further clarify the meaning of the Myths of the City and to anchor our results to the broader social cognition literature, as well as a number of questions to explore perceptions about cities, and some basic demographics. These items are available in Appendix C, Section C.2.

Finally, the survey was conducted in May 2016 with 612 participants from three capital cities in Australia (Sydney, Melbourne, and Perth). Further details about the survey and respondents' selection can be found in Appendix C, Section C.3.

Results

Myths of the City: identification

In this section, we briefly summarise the data analysis and the main results, while a detailed description of the analysis can be found in Appendix A. The 98 litanies were subject to exploratory factor analyses (maximum likelihood extraction with oblimin rotation) to identify their underlying structure. The Comparison Data method (Ruscio and Roche 2012) indicated that a three-factor structure proves statistically significant against bootstrapping random data with a similar factor structure. This confirmed the visual inspection via Cattell's scree test (Cattell 1966). The three-component solution explains 37.7% of the variance with each component contributing 20.8, 10.0, and 6.9%, respectively. Next, to reduce the number of litanies explaining each factor, we selected the items with strong loading on only one factor (see Section1.3 in Appendix A for selection criteria). 14, 7, and 7 items were retained for the first, second, and third factor, respectively. Confirmatory factor analyses were then conducted to test whether the data fit the hypothesized three-factor model (see Section 1.4 in Appendix A). The number of items per factor was reduced in an iterative way to achieve a good model fit for each separate model. Finally, a structural equation model was assessed and indicated good model fit (CFI = 0.93; TLI = 0.92; RMSEA = 0.049; 90% CI = 0.043, 0.057).

This analysis shows that a significant component of the common variance in the data can be explained by three factors, each characterised by a small number of litanies, as shown in Table 1. These factors and their associated litanies represent the proposed Myths of the City. We created a scale for each factor by averaging the raw scores on the items defining each factor, presented in Table 1. Measures of internal consistency

Table 1 Three Myths of the City factors and their items

Myth 1—Anti-Urban
Because of globalisation, cities have lost their identity and look the same
Urban development is not working very well
Urban development has resulted in disadvantage and inequality
Segregation is a serious problem in cities
The population in cities has grown to unsustainable levels
Cities are responsible for the depletion of natural resources
Although there are many things to do in cities, few of them are affordable
Although there are many things to do in cities, people do not have enough time to enjoy them
People in cities are more likely to be unhappy and depressed
Cities contribute to social alienation
Myth 2—Cultural City
As cities grow, citizens are exposed to more ideas and cultures
Cities are places of cultural diversity
Entertainment and culture make cities more attractive
Architecture and heritage buildings are an important component of a city
Natural areas in cities make them more attractive places to live
Myth 3—Mighty City
Larger cities are more appealing than small cities and towns
The population in cities is healthier and more health-conscious
People in cities are more concerned about protecting the environment
As cities grow, they become better places to live
With better technology, we can solve all problems in cities
Cities work best when they are high density and built-up

indicate that the three sets of items demonstrate a good reliability, with Cronbach's alpha of 0.857, 0.794, and 0.815 for the first, second, and third myth, respectively.

The first myth represents a strong negative view of urban life, city development, and of the impact of cities on social wellbeing and the natural environment. Cities are seen as growing too crowded with unhappy people living in personal alienation among social segregation and inequality. Urban development is seen as following an unsustainable path to social and environmental degradation which is unlikely to improve in the future. Cities have lost their cultural identity as a result of globalisation. While they offer many opportunities, people have too little time and money to access them. We call this the Anti-Urban Myth because of its relation to anti-urban ideology (Hummon 1985).

The second myth identifies cities with culture and diversity. It represents the belief that what makes cities interesting is culture, ideas, creativity, diversity, and architecture and that this is further enriched by natural areas. We call this the Cultural City Myth.

The third myth appears to incorporate two sets of beliefs: the first about what makes life in a city better than living in other places and the second about what is likely to improve with urban growth and technological advances. This myth seems to endorse the urbanist ideology which in Hummon (1985) is proposed as an antithesis to the Anti-Urban Myth. Because it endorses a clear preference for living in the city, we call this the Mighty City Myth. Notice that while the Cultural City Myth makes statements about qualities of cities per se, the Mighty City Myth expresses comparative judgements: of cities vs non-cities and of current cities vs future ones.

Relations between the Myths of the City

In this section, we analyse the inter-relation among the three myths, as shown in Table 2. All correlations are statistically significant and, more importantly, positive. For example, Table 2 shows that the Anti-Urban Myth and the Mighty City Myth show a positive, statistically significant correlation. In other words, there is a small but significant probability that people endorse both positive and negative views of urban living when the positives and negatives are driven by issues encapsulated in the meaning of the two myths. The same applies the other two pairings between the Myths of the City.

Table 2 Correlations among the Myths of the City

	Anti-Urban Myth	Cultural City Myth
Cultural City Myth	**0.12***	
Mighty City Myth	**0.16****	**0.11***

Values are statistically significant at the following levels * $p < 0.01$ and ** $p < 0.001$

Myths of the city: interpretation

Table 3 shows the correlation between the three myths and some of the questions and constructs described in Appendix C, Section C.2. The grey rows in Table 3 refer to general attitudes and expectations about the future, while the blue rows refer specifically to three of the Myths of the Future. The two pink rows reflect attitudes towards the environment and political ideology, respectively, while the white rows at the bottom refer to specific questions about the understanding of and attitude towards cities.

The pessimistic tone of the Anti-Urban Myth is clearly confirmed by the correlations in Table 3 (second column). While the Anti-Urban Myth (as the other two myths) displays concern for future consequences, it is the only myth negatively and significantly correlated with the Future Time horizon, reflecting a perception of the future as relatively close to the present. The view of the future is bleak since it is seen as less safe, healthy, friendly, honest, skilled, and open minded. The standard of living and environmental concerns are expected to decrease, while social crisis and inequality are expected to increase. The environment is seen as ductile, that is potentially unable to respond to uncontrolled exploitation. As expected by all this, citizens adhering to this myth are less likely to be positively attached to the city they live in and to have a positive attitude towards urban growth. Notice that all these relations are statistically significant with particularly strong correlations with the Social Crisis and Power & Economic Inequality Myths of the Future.

The Mighty City Myth has a very different connotation compared to the Anti-Urban Myth, as we may expect from the analysis in Section 3.1. It shows (fourth column in Table 3) a bright view of the future which is expected to be safer, healthy, friendly, honest, skilled, and open-minded, to provide an improved standard of living, environmental concerns, and technological progress. It shows no specific attitude towards social development and political and economic inequality (rows 11 and 13). It is indifferent to environmental concern (Environment as Ductile) and shows fairly strong hierarchical and conservative views (Social Dominance Orientation). It also displays strong place attachment, a positive view of urban growth and the beliefs that cities can be a part of Nature and Nature a part of cities (rows 18–20).

The Cultural City Myth shares some features with both the Mighty City Myth and the Anti-Urban Myth. It displays the strongest association with concern for future consequences (row 2). Expectations for the future are mostly positive (rows 4, 7–10 and 12), except for what regards

Table 3 Correlations between the Myths of the City and other constructs

		Anti-Urban Myth	Cultural City Myth	Mighty City Myth
1	Future Time-horizon	**-0.09**	0.01	-0.07
2	Concern Future Consequences	**0.29****	**0.46****	**0.19****
3	Future Safe	**-0.19****	0.0463	**0.33****
4	Future Healthy	**-0.21****	**0.11***	**0.32****
5	Future Friendly	**-0.20****	0.0634	**0.35****
6	Future Honest	**-0.12***	0.0812	**0.33****
7	Future Skilled	**-0.10**	**0.24****	**0.12***
8	Future Standards	**-0.20****	**0.12***	**0.32****
9	Future Green	**-0.17****	**0.25****	**0.21****
10	Future Open-Minded	**-0.19****	**0.23****	**0.27****
11	Social Crisis	**0.56****	**0.14***	-0.01
12	Techno Optimism	-0.02	**0.50****	**0.29****
13	Power & Eco Inequality	**0.52****	**0.36****	-0.03
14	Environment as Ductile	**0.26****	**0.51****	-0.04
15	Social Dominance Orientation	0.05	**-0.39****	**0.23****
16	Place Attachment	**-0.10***	**0.38****	**0.28****
17	Attitude to Urban Growth	**-0.18****	**0.09**	**0.29****
18	Are cities part of nature?	-0.03	**0.13***	**0.25****
19	Can wilderness exist cities?	0.01	0.06	**0.22****
20	City spatial boundary	-0.03	0.05	**-0.16****

Values in bold are statistically significant and the following levels $p < 0.05$, * $p < 0.01$, ** $p < 0.001$

social issues (rows 3, 5–6, 11 and 13). It shows a very strong environmental concern (Environment as Ductile) and strong egalitarian, progressive political views (Social Dominance Orientation). It also displays high place attachment and the belief that cities can be a part of Nature (row 18).

Table 4 further helps characterise the Myths of the City with regards to economic (white rows) and political (grey rows) views. It shows the correlation between the myths and some of the litanies which were discarded by the Factor Analysis (in the sense that their inclusion would not significantly improve the model) but which can still provide useful insight into our analysis. The pessimistic, almost fatalistic tone of the Anti-Urban Myth is once again clearly confirmed (second column). The Cultural City Myth shares the belief that cities are under poor economic management (row 3) but holds a positive view of the contribution of large cities to the national economy (rows 1–2). It also reflects the belief that current political and economic management is too centralised and biased towards large business interests (rows 4 and 5) and endorses a more egalitarian political participation (row 6). The Mighty City Myth is particularly unclear on these issues. It does not express preferences for any of the

Table 4 Correlations between the Myths of the City and litanies reflecting economic (white rows) and political (grey rows) views

		Anti-Urban Myth	Cultural City Myth	Mighty City Myth
1	Cities are a drain on the national economy	**0.55**	**-0.18**	**0.24**
2	Cities help the national economy grow	0.10	**0.53**	**0.32**
3	The way cities are managed leads to wasting lots of taxpayers' money	**0.55**	**0.25**	-0.04
4	State and Federal government spend too much money on cities at the expense of towns and regions	**0.47**	**0.14**	0.06
5	Political decisions in cities are becoming more about the benefit of big businesses	**0.50**	**0.33**	0.01
6	Greater public participation can improve urban planning processes in cities	0.08	**0.50**	0.04

Values in bold are statistically significant at $p < 0.01$

Table 5 Correlations between the Myth of the City and basic demographic data

	Anti-urban Myth	Cultural City Myth	Mighty City Myth
Age	−0.06	**0.11**	**−0.32***
Gender	0.00	−0.08	0.01
Education	0.01	0.04	**0.14***

Values in bold are statistically significant and the following levels: $p < 0.05$, * $p < 0.01$, ** $p < 0.001$

political statements (rows 4–6) and seems to share the beliefs that cities can be both a drain on the economy and a driver of economic growth (rows 1 and 2).

Finally, Table 5 shows the correlations between the Myth of the City and basic demographic data. Respondents endorsing the Mighty City Myth seem to be younger and better educated than the average while respondents endorsing the Cultural City Myth are likely to be slightly older.

Additional results

In this section, we briefly summarise some additional results from our survey, including some first impressions about Australian cities, which litanies are most agreed on, perceptions about who makes things happen in cities, perception of the future time-horizon related to urban issues and distribution of endorsement for each myth. Full details of each of these results can be found in the Supplementary Materials in Appendix B.

To assess the spontaneous and intuitive impressions of large cities, we analyse the first question of the questionnaire 'What are the first five words that come to mind when you think about major Australian cities?', by grouping into different categories words with similar meaning or related topic (see Table 6 in Appendix B, first column). Cities are seen as beautiful places, rich with opportunities for entertainment and culture but also as big, busy, and crowded. These results are consistent with the three Myths of the City described above. Interestingly, words related to the economy and political organisations have a fairly low occurrence [we obtained similar results in studying the perceptions about urban resilience (Boschetti et al. 2017)]. Similarly, innovation, technology, and education have a low occurrence, which is surprising given the international standing Australian cities hold for university education (which attract a large number of overseas students) and research performance. More details about impressions about Australian cities can be found in the Supplementary Materials in Appendix B, Section B.1.

The factor analysis, used to detect the Myths of the City focusses on explaining the common variance in the data. Litanies with small variance may be disregarded by the factor analysis because they reflect issues on which the majority of the respondents agree upon and thus offer little discriminatory power. Nevertheless, there are situations in which the identification of these issues may be useful.

Table 7 in Appendix B, Section B.2, shows the litanies on which respondents agree the most. They focus mostly on the problems caused by traffic and poor health, the high cost of living, the desire for more green areas, the importance of culture, entertainment, and diversity.

Perceptions of power relations within cities were analysed by asking 'Who makes things happen in major Australian cities?' Results are shown in Fig. 1, Appendix B, Section B.3. City councils, State/Territory government, and Big business are perceived to hold the most power in Australian cities, but in general, power is perceived to be distributed among many players. A factor analysis of these perceptions of power is discussed in Appendix B, Section B.3.

In a previous survey, we found that the act of answering questions about the future significantly changed the perception of the future time-horizon, that is the perception of when the future will 'occur' (Boschetti et al. 2016). Very similar results were obtained in this survey by asking 'When you think of the future, what time frame is it?' As discussed in Appendix B, Section B.4, the distribution of answers obtained in this survey suggests that answering the litanies about the cities did not prompt thoughts about the future. This also suggests that in a public engagement process it is likely that most participants will hold a time-horizon of $\sim$5 years into the future with a minority stretching to $\sim$20 years and only very few holding a perception of the future which extends farther away.

Finally, Table 9 in Appendix B, Section B.4, shows the distribution of endorsement for each myth for the overall set of respondents and for respondents living in Sydney, Melbourne, and Perth separately. The Cultural City Myth receives the strongest endorsement both in terms of mean score and, even more clear, in terms of the number of respondents giving it the highest score. Also, the ratio between endorsement for the Cultural City Myth and Anti-Urban Myth is largest in Perth, this result being significantly different from the ratio over the full set of respondents ($p < 0.05$). This may be due to Perth being smaller, less busy, and less congested than Sydney and Melbourne, although this needs further empirical validation.

Discussion

The results in Tables 3 and 4 shows that with the exception of the Concerns for Future Consequences, the three Myths of the City have a very distinct signature, which reinforces the robustness and significance of our results. The Cultural City Myth is the most endorsed. It projects a fairly optimistic outlook on urban life and development, mostly based on expectations of technological, cultural and environmental improvements. This results in a positive attitude towards life in a large city, urban growth and the role large cities can play in the national economy. However, it is also wary of power forces (mostly government) and lurking social and environmental crises. It has a fairly liberal, left-wing connotation in favouring non-hierarchical power relations and calling for larger public participation in urban planning. Less endorsed are the Anti-Urban and the Mighty City Myths. The first has an unequivocally negative outlook on the future, a strong concern for both social and environmental crises and sees cities as mostly driven by economic forces. Technology is not seen as a possible driver of improvement. Inevitably, the Anti-Urban Myth displays low attachment to urban living and a negative attitude towards urban growth. It has a close resemblance with the fatalistic Myth of Human Nature discussed in the Introduction. Almost diametrically opposite appears to be the Mighty City Myth, which displays an immaculately positive outlook on the future and expectations that all aspects of future life will improve. It is optimistic towards technological development and appears to be endorsed by a younger, better educated demographic group with less liberal, hierarchical views. If these interpretations are correct, then the perceptions of who holds power in urban matters may represent fears and concerns more than actual beliefs, since the agents perceived as most influential are the ones farthest from the values each myth seems to represent (government for the Cultural City Myth, citizens for the Mighty City Myth and business for the Anti-Urban Myth).

The Mighty City Myth and the Anti-Urban Myth appears to be diametrically opposite, as the literature would suggest (Hummon 1985). However, as shown in Table 2, they share a small, but statistically significant positive correlation. As discussed in Section 3.2, this means that respondents who (do not) subscribe to the Mighty City Myth are also likely (not) to subscribe to the Anti-Urban Myth. The same applies to the relation between these two myths and the Cultural City Myth. This is an important contribution this study makes to the literature and points to a direction for further research: citizens may simultaneously hold contrasting beliefs about urban issues and it is important to better understand whether this may be affected by context, to what extent the respondents are aware of this and, should a choice be forced upon them, how they would resolve the contrasting beliefs.

In this work, we have extended the analysis of the relation between the Cultural Theory and urban studies as discussed in Thompson and Beck (2015) by incorporating a larger number of constructs from the social cognition literature. Of particular relevance are attitudes towards the future. Both the arts, the academic literature and popular culture have devoted considerable attention to visions of future urban development, which range from a planning

and design focus to apocalyptic, utopian, or extravagant speculations. Here, we contribute empirical results on the relations between views of the cities and views, expectations, and fears about the future grounded on fairly pragmatic concerns about social, political, economic, and technological progress. This is likely to be of utmost relevance for urban planning, which, as it is the case for infrastructure development, pertains to a time-horizon of several decades, while our respondents reveal a future time-horizon of around 5 years. Given the crucial impact that time-horizon can have on decision-making and attitude towards the future (Boschetti et al. 2016b; Richert et al. 2017) this is an area which deserves particular attention, specifically in the context of public support for urban planning.

While these results help clarify the relation between the Cultural Theory, the Causal Layered Analysis, and urban studies, restrictions on the length of the questionnaire have prevented us from fully exploring some of these aspects. Our results suggest that this line of research can be of interest for at least three reasons. First, it is important to elucidate the relation between the Myths of Human Nature and the Myths of the City, about which we have only tentatively speculated in this work. Second, it would also clarify to what extent Cultural Theory, which was developed to study perceptions of risk, power, and attitudes towards the natural environment, can be ported, unaltered to urban studies. Third, at its core, this is a question of the extent to which life, human relation, and the environment in large cities are understood within the same framework as for local, natural, national, global, or abstract settings.

Besides better exploring the relation between the Myth of the City and the Cultural Theory, this work could be improved in several other directions. One important current limitation is the study design: our respondents were all Australian residents of three large cities. As a result, we studied the opinions of urban citizens living in an English-speaking, fairly well developed and wealthy nation. It would be interesting to extend the survey to Australians living in towns and rural areas to appreciate the perception of the city and of its impact on the rest of the nation as seen from outside urban life. Naturally, it would also be important to extend this work to different cultures and to nations in different development stages. For this aim, we make our questionnaire available in Appendix B. Depending on the purpose of the work, the set of litanies may need to be modified to fit the specific context. It would also be of interest to extend the survey to city council personnel and policy makers and assess to what extent the views of urban life and development from the decision-making perspective matches the public perception.

We have discussed how our work contributes to the urban studies literature and highlighted its current limitations. We conclude by discussing how this approach could be used outside the academic environment and applied to stakeholder engagement for urban planning. First, the three Myths of the City, together with the litanies in Appendix D Section 2, provide an overview of the issues on which stakeholders are most likely to agree and the ones on which they are more likely to disagree. For the issues on which they are more likely to disagree, the Myths of the City provide the underlying structure over which the disagreement can be understood and addressed; our work shows that disagreements are unlikely to be random, rather they are likely to be reducible to a small set of underlying beliefs and perceptions whose relation with other psychological and social constructs is also non-random, but easily interpretable. This can provide a framework around which specific decision-making issues can be understood and discussed. Naturally, this does not circumvent the need to assess the views of the specific stakeholders of specific decision-making problems; it rather provides a starting point for this analysis. The second step may involve asking these very stakeholders to answer the questionnaire in Appendix B. This can provide not only a better understanding of the specific audience but also a comparison with our broader sample, which can be used as an initial reference. The comparison could be discussed publicly with the stakeholders in the introductory stage of a workshop. In our experience, this can be very useful. Responders usually appreciate the opportunity to see and discuss the outcome of their survey as well as to understand how their team compares to other groups; usually, this more than compensates the effort they put in answering the questionnaire. In addition, this interactive session can be very effective in introducing the workshop topic and casting the decision-making issue within a broader context.

Conclusions

This study has shown the diversity in thinking about cities that exist within the community in three large Australian cities. This is important because of the increasingly common notion of cities as the main drivers of cultures, economies, material use, and waste generation, as well as the key determinants in the process of achieving global sustainable development goals subject to planetary boundaries (Hoornweg et al. 2016). Coupled with the notion that traction for sustainability and action requires community support, this study shows that a relatively large proportion of people (those subscribing to the Anti-City Myth) disagree with the potential role of cities in global sustainability. This perspective needs to be considered and respected when developing plans for urban sustainability; especially when local councils rely on community surveys

to justify their actions for environmental or social policies. Furthermore, this study shows a number of litanies and notions that members of the public commonly believe in. It is, thus, quite possible to identify common misconceptions about cities if such litanies are evaluated against data and research when such data and/or research is available.

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